

a page divider for dividing generated print data for each page into a plurality of bands, wherein the generated print data is generated by an application; and

a transfer controller for transferring a sequentially selected one of the bands to an available one of print data expanders of the print server computer and other client computers, wherein expanded bit-map band data by the print data expander of each client computer is transferred to the print server computer, and

the print server computer comprises:

a combiner for combining bit-map band data expanded by the print data expander of the print server computer and the expanded bit-map band data received from at least one of the client computers to produce bit-map data corresponding to the generated print data.

A1 8. (Amended) The network system according to claim 7, wherein the transfer controller selects one band from the bands in sequence and further selects an available one of the print data expanders of the print server computer and the other client computers by checking a print data expanding process status received from each of the print server computer and the other client computers, and then transfers a selected band to a selected print data expander.

9. (Amended) The network system according to claim 7, wherein, when receiving a band from another print data expander, each of the plurality of print data expanders expands the received band to bit-map band data, sets a print data expanding process status of a print data expander of its own to unavailable while expanding the received band, and resets the print data expanding process status to available when the expanding process of the received band has been completed, wherein the print data expanding process status is used to determine whether a corresponding print data expander is available.

10. (Amended) The network system according to claim 8, wherein, when receiving a band from another print data expander, each of the plurality of print data expanders expands the received band to bit-map band data, sets the print data expanding process status of its own to unavailable while expanding the received band, and resets the print data expanding process status to available when the expanding process of the received band has been completed.

11. (Amended) The network system according to claim 7, wherein the page divider divides the generated print data for each page into the bands which are numbered from top of a page in sequence.

Sub 2  
A1

12. (Amended) The network system according to claim 11, wherein the combiner receives the bit-map band data expanded by the print data expander of the print server computer and the expanded bit-map band data received from said at least one of the client computers, determines whether the bit-map band data are received in original sequence of the bands, rearranges the bit-map band data in the original sequence when a sequence of the bit-map band data is not identical to the original sequence, and reproduces the bit-map data corresponding to the generated print data.

13. (Amended) A print data control method for a network system composed of a print server computer and a plurality of client computers, comprising the steps of:

at each of the plurality of client computers,

- a) dividing print data into a plurality of sequential bands;
- b) distributing the sequential bands over the print server computer and at least one of the client computers to expand the sequential bands to bit-map band

data in parallel among the print server computer and said at least one client computer;  
and

at the print server computer,

c) combining the bit-map band data expanded by the print server computer and said at least one client computer to produce the bit-map data corresponding to the print data.

14. The print data control method according to claim 13, wherein the step b) comprises the steps of:

at the client computer,

selecting one from the sequential bands in sequence;

selecting an available one of the print server computer and the client computer by checking print data expanding process statuses thereof;

transferring a selected band to a selected computer;

expanding a client-received band to bit-map band data; and

setting a print data expanding client process status to unavailable while expanding the client-received band and resetting the print data expanding client process status to available when a print data expanding process of the client-received band has been completed, and

at the print server computer,

expanding a server-received band to bit-map band data; and

setting a print data expanding server process status to unavailable while expanding the client-received band and resetting the print data expanding server process status to available when a print data expanding process of the client-received band has been completed.

15. (Amended) The print data control method according to claim 13, wherein the step c) comprises the steps of:

A1  
C-1  
determining whether the bit-map band data are received in original sequence of the bands;

rearranging the bit-map band data in the original sequence when a sequence of the bit-map band data is not identical to the original sequence; and

reproducing the bit-map data corresponding to the print data.

---

21. (New) A network system composed of a print server computer comprising a plurality of client computers, wherein each of the plurality of client computers comprises:

A2  
a first print data expander for expanding print data to bit-map data;

a page divider for dividing generated print data for each page into a plurality of bands, wherein the generated print data is generated by an application; and

a transfer controller for transferring a sequentially selected one of the bands to an available one of print data expanders of the print server computer and other client computers, wherein expanded bit-map band data by the print data expander of each client computer is transferred to the print server computer,

the print server computer comprising:

a second print data expander for expanding print data received from at least one of the client computers to bit-map band data;

a combiner for combining bit-map band data expanded by the print data expander of the print server computer and the expanded bit-map band data received from at least one of the client computers to produce bit-map data corresponding to the generated print data.

22. (New) A network system composed of a client computer comprising of a print server computer and a plurality of client computers, comprising:

a print data expander for expanding print data to bit-map data;

a page divider for dividing generated print data for each page into a plurality of bands, wherein the generated print data is generated by an application; and

a transfer controller for transferring a sequentially selected one of the bands to an available one of print data expanders of the print server computer and other client computers, wherein expanded bit-map band data by the print data expander of the client computer is transferred to the print server computer,

wherein the print server computer combines bit-map band data expanded by the printer server computer and the expanded bit-map band data received from at least one of the client computers to produce bit-map data corresponding to the generated print date.

23. (New) A network system composed of a plurality of client computers comprising of a server program for instructing a print server computer, wherein each of the plurality of client computers comprises:

a first print data expander for expanding print data to bit-map data;

a page divider for dividing generated print data for each page into a plurality of bands, wherein the generated print data is generated by an application; and

a transfer controller for transferring a sequentially selected one of the bands to an available one of print data expanders of the print server computer and other client computers, wherein expanded bit-map band data by the print data expander of each client computer is transferred to the print server computer,

the server program comprising the steps of:

expanding print data received from at least one of the client computers to bit-map band data;

combining bit-map band data expanded by the print data expander of the print server computer and the expanded bit-map band data received from at least one of the client computers to produce bit-map data corresponding to the generated print data.

24. (New) A network system composed of a print server computer and a plurality of client computers comprising of a client program for instructing a client computer, wherein the program comprising the steps of:

expanding print data to bit-map data;

dividing generated print data for each page into a plurality of bands, wherein the generated print data is generated by an application; and

transferring a sequentially selected one of the bands to an available one of print data expanders of the print server computer and other client computers, wherein expanded bit-map band data by the print data expander of each client computer is transferred to the print server computer.